TABLET COMPUTING DEVICE WITH THREE-DIMENSIONAL DOCKING SUPPORT

ABSTRACT OF THE DISCLOSURE

The present invention provides a tablet computer and a docking station assembly. This docking station comprises a docking assembly for positioning with three degrees of freedom and having a data connector for mechanically supporting and interfacing with the tablet computer. A support member couples the docking assembly to an expansion base. The base includes a number of ports for interfacing with a variety of peripheral devices or power supplies. These varieties of ports mount to a printed circuit board contained within the expansion base. A flexible printed circuit (FPC) combines the signal pathways for the variety of ports, allowing the signal pathways to travel from the printed circuit board and to the data connector. The tablet computing device has a plurality of contact or touch points positioned on the right and left edges of the tablet to facilitate aligning the tablet to the docking assembly in either a landscape or portrait mode.